and greens. When the harvest is finished and the rice in the *komby* 2-43
the members of the family return to the village. They have been
away for five months. The man repairs the *tranoomby* [rice granary]
and the rice is brought to it from the *komby*, the whole village assisting.

"Maize (*tasko*) is cultivated in the whole region and is second to
rice. We distinguish a number of varieties: *taskoala*, *varadeja*,
ambaramborivo, *taskobely*, *taskofotsy*, *taskolavaka* and *taskovondro*.
Maize is grown in all seasons, but it is during the hot season that it
gives the best yield. It is sown in the *tany* at the same time as the
rice, or planted in alluvial soil in the valleys. Small holes are made
with a pointed stick from 50 to 70 centimeters apart and two or three
grains put in each hole. It is ripe three or four months after planting.
The maize for the next sowing is put in a dry bamboo filled with
ashes to keep the insects from damaging it. That which is to be
eaten is put in a dry place over the fire or hung up in the granary.
Maize pounded and cooked in water with beans or honey forms an [25-2]
excellent food. We also eat it roasted.

"Beans (*voatsi*) are very common in the region. We distinguish 2-44
eight species: *voatsilakolo*, *voatsilavavaka*, *salotsapa*, *tsimokorio*,
ravanavan, *voatsilo lo*, *voatsilavaky*, and *voatsilavavaky*. Beans like
alluvial soil or the site of an old village. Like maize, they are planted
in small holes about 50 centimeters apart, two or three seeds to the
hole. They are planted in the month *Sakaw* [September] in newly
burned ground. The crop is weeded when the plants have three
leaves. At the end of the second month they flower and produce
pods. At the end of the third month the pods break off and are
harvested.

"Manioc (*kamoke*) attains a height of 2 to 3 meters. There
are two varieties, *kamoke ala*, which is best, and *dompoky*. It is
planted by cuttings, which grow readily, even in very poor soil. It
is planted in the month *Sakaviavy* [August]. When the ground is
ready, holes are made about a meter apart and a cutting put in each
hole, care being taken to place it horizontally. It is weeded about
forty-five days after planting. At the end of seven months one may
begin to gather it. The root is sometimes eaten raw, but is more often
boiled or roasted in hot ashes. The root is also preserved by cutting
it in pieces and drying it in the sun."

The above account needs to be supplemented in several details. 2-46
In agriculture by the *tany* method it is necessary to allow the land
to lie fallow for from five to ten years between plantings. The
growth which springs up during this time consists mostly of bamboo,

in use: a stiff, rectangular piece of matting about 2 feet square, a large, circular tray of basketry with a wooden rim, and a circular tray of light wood (Fig. 1, h, j). Threshing and winnowing are usually done by women.

After winnowing, the dark skin of the rice grains is removed by pounding in a mortar with a pestle. This is woman's work, although men and boys sometimes assist. The pestles are made from a variety of hard, heavy woods and are finely shaped and finished (Fig. 1, g). They are 4 to 5 feet long and 3 to 3½ inches in diameter at the ends, tapering to a smooth central grip about 18 inches long and 1½ to 2 inches in diameter. A good pestle balances exactly in the center. The two ends are used interchangeably. Three types of mortar are in use. The oldest, now employed only as a makeshift, is made by digging a hole in hard ground and lining it with a smooth coat of clay. A fire is then kindled in it and the clay burned hard. Stone mortars are known, but no specimens were seen and I could learn nothing concerning their form or manufacture.

The ordinary mortar is of wood, with an oblong top and truncated pyramidal base (Fig. 1, g). Although not set in the ground, it is so heavy that it is rarely moved. In some villages I saw the mortars for an entire lineage set up together under an open roof, with the pestles leaning against a bar beside them. Although the mortars seemed to be used indiscriminately, pestles are strictly personal property. They are made for the women by their husbands and a woman will resent another's using her pestle without permission. Each woman usually does her rice pounding alone, but occasionally two people will pound together, striking into the mortar alternately, in perfect time. This seems to be commoner with half-grown boys and girls than with adults.

When a great deal of rice is being pounded at one time, a stiff sleeve of matting, like a basket without a bottom, is set on top of the mortar. It is not attached to the mortar and is not used at ordinary times.

After pounding, the rice is winnowed again, to remove all hulls and dust. That used at ordinary times is rarely pounded to complete whiteness. Even the best is not polished. The grain is prepared a little at a time, as needed for cooking.

Among most of the Menabe genius cultivation of dry rice by the fire method is certainly older than the cultivation of wet rice. This probably holds for the Ikongo as well. Most of the Menabe have

give each other sympathy in their affliction. If one was castrated alone, he would die of grief. The Betsileo have a similar belief, but I could not learn whether it was universal among the Tanala. 825

Most of the Tanala territory is poorly suited to cattle culture because of the heavy forest and constant rain. It is only along the western margin of their lands, where they border on the plateau, that one finds real grazing country. The Tanala herds are usually small and, although cattle have great social significance, they contribute little to the physical well-being of the people. They are only killed in connection with ceremonies, and the average Tanala does not taste beef once a month. Indeed, cattle killings are so rare that to dream of cutting or eating beef is a bad omen, presaging a funeral in the family. Hides are so little used that, until European traders provided a market for them, it was customary to cut up the animals without flaying them and cook meat and skin together. 235 311 [262] [761] [439]

The Menabe consider milk a luxury, and it is almost impossible to purchase it in their territory. It is a by-product, taken only when the cow seems to have more than enough to feed her calf. Milking, like everything else connected with cattle, is done exclusively by men. The explanation given for this is that it is a dangerous occupation. Actually, it is a laborious process, requiring three persons. One man holds the calf where the cow can see and lick it, another milks, usually squatting on the right side, and a third holds the cow's tail over her back and gently rubs her vagina with his fingers. The milk is boiled at once, while still warm. It is considered disgusting to drink it fresh. After boiling, it is either drunk or cooked with rice. 234 462 [252]

The Ikongo make more use of milk and are somewhat more expert at milking, although they use the same method. They rarely boil their milk. A little is drunk fresh, but most of it is deliberately soured. A little sour milk is always left in the milking gourd so that the new milk turns almost at once. The curds are eaten with a spoon and the whey drunk. None of the Tanala know how to make butter or cheese. 234 252 [204]

Apparently cow's milk was rarely if ever used to supplement or replace mother's milk in feeding nursing infants. The idea has recently been borrowed from Europeans, but it is still considered rather unnatural and is used only as a last resort. 853 177

The wheel and plow were unknown in Madagascar prior to European contact. The Tanala never use their cattle for draught or transport and this holds for the rest of the island, with one or two exceptions. The Imerina and Betsileo now use ox carts and 177 472

1: Linton E-5 (1926-27) 1933 FTS Tanala FTS

the juice being allowed to float downstream with the current. The 226
fish rise to the surface stupefied or dead and are taken by hand. A large quantity of roots is required and the whole lineage or even village usually takes part. At the present time the method is rarely used, because of the labor involved.

The natives are very fond of two sorts of crayfish. One of these has short legs and large claws, like a lobster, while the other has long legs and no claws. Parties often go several miles from the village to catch crayfish in the small, swift mountain streams, staying out all night. The animals are usually caught by the light of torches, which stupefies them so that they can be picked up. In the daytime they are lured from their holes by means of a white or glittering object on the end of a stick. A bit of tin from a can is now used. They are then caught by hand or between two bits of wood, to avoid their claws.

Eels and other fish are preserved by smoking, without salt. They 251
are not cleaned. The smoking is done on small platforms of open-work bamboo which are hung over the fireplace in the dwelling (Fig. 3, c). In spite of the crudity of the method, fish preserved in this way can be kept for a year or more and, when cooked in native fashion, are hardly inferior to the fresh article. Fish are nearly [252] ●
always boiled.

HONEY AND BEESWAX

Honey and beeswax are of great importance to all the Tanala. 231
The latter is one of their main exports. The native bees are rather [232]
small and dark brown or black. Most of the swarms live in hollow trees or among the rocks, but the Tanala make hives, put these near old swarms, and wash them inside with honey in the hope that new swarms will settle in them. Such swarms belong to the maker of [233]
the hive, while wild swarms belong to the finder.

The hives are made from hollowed-out logs with loosely fitting, inset ends. The cracks around the ends are large enough to allow the insects to enter. The hives are usually 3 to 5 feet long and about 1 foot in diameter. They are laid horizontally in the forks of trees, often as much as twenty feet from the ground. This is to protect the swarms from animals.

To obtain the honey and wax, the swarm is first stupefied with 233.
smoke from torches. The end of the hive is then pried out and all the comb removed at once, destroying the colony. A large wooden bowl of special form is used for collecting the honey (Fig. 4, e). The

281 415 tail are tied together. The tension draws the strip of bamboo against the belt, closing the opening (Fig. 5, c). Similar belts are used by the southeast coast tribes but are rare or lacking elsewhere in Madagascar.

POTTERY

323 173 According to the legends and traditions of the Tanala Mesobe, the Zafimaniry were the only gens of that division to manufacture or use pottery in ancient times. Later, several other gentes learned the art from them and from the Betsileo, but they never became great potters and abandoned clay vessels as soon as iron pots became common. It is remembered that the pottery was limited to crude cooking pots except among the Zafimaniry, who had bowls and water jars as well, but the methods of manufacture and even the shapes have been forgotten.

[114] According to the manuscript of Raharo Antoine the Tanala Ikongo manufactured cooking pots as recently as twenty years ago. The ware is said to have been hard and well fired. It was given a black, glossy finish by rubbing it with graphite.

A number of Madagascar tribes, including all those on the east coast, make no pottery. Other tribes, who now use it, say that they have only begun to do so within the last five or six generations. It seems probable that it was introduced into Madagascar in relatively [117] late times. The best center for its diffusion seems to be among the Imerina and Betsileo in the plateau, with a possible second center among the northern Sakalava, on the west coast.

METHODS OF COOKING

• 252 In describing the methods of Tanala cooking it is necessary to distinguish between the ancient methods, in vogue before the introduction of pottery and later of iron pots and toasting forks, and those now in use. At present the former survive only as a part of ceremonial, or as makeshifts used in the absence of proper utensils.

Traditionally, the earliest method of preparing rice was to crush the grains and toast them over a fire. This survives as a feature of the harvest sacrifice (see Agriculture), but is otherwise obsolete. Later, rice and other vegetable foods were boiled in large joints of green bamboo. The joint was propped up in an open fire and the food would be cooked before it burned through.

Meat was laid on a bed of coals or cooked in a sort of earth-oven called *ombigodro*. A hole was dug and lined with large leaves. The

meat was cut, each piece wrapped in leaves, and the whole packed in. Stones, heated in a near-by fire, were placed on top and the whole covered with more leaves, but no earth or embers. The moisture from the meat and leaves made a little broth, which collected in the bottom of the hole. This method continued in use long after the introduction of pottery and one locality is still known as Antoenatra because it was the usual practice of the people living there.

Calves or small cattle were sometimes cooked whole by means of their spongy vines of two species called *ratsipila* and *ratsimavom*. The ends of two or three of these vines were inserted into each nostril and into the anus, while the other ends were put in a fire. The hot sap and steam conducted into the animal in this way cooked it thoroughly. It is said that this method is still used by cattle thieves when they wish to devour their booty on the spot.

At the present time nearly all food is boiled in iron pots obtained from the traders. Such pots are highly valued and when a Tanala leaves his own territory to work in a town he will usually purchase one with his first wages. Some native families have a number of them displayed on the shelf above the fireplace as a sign of wealth. They are readily loaned to neighbors or travelers, but etiquette requires that the borrower leave a little food in the pot when he returns it. Pots are supported in the fire by a low tripod made from three pointed stones bedded in the earth of the fireplace.

The amount of rice to be cooked for a meal is measured out by means of a small, stiff basket. This is of standard size and holds slightly more than the cup used as a unit in our own recipes. One measure of dry rice is allowed for each adult, with a smaller measure for each child. In some houses I saw a number of graduated rice measures, used for children of different ages.

The rice, which has previously been pounded and winnowed, is washed until the water drains off clear. It is then put in the pot with about twice its amount of water. It is allowed to boil dry. Most of the grains are crisp and fluffy, but a layer of burned rice adheres to the vessel. After the unburned rice has been taken out, water is put in the pot, stirred and brought to a boil. This water, which tastes somewhat like weak coffee, is drunk with the meal and is considered a delicacy. As a luxury, rice may be boiled with milk or broth. It is rarely if ever salted while cooking.

Although boiled rice is the staple diet, it is never served without a side dish of some sort to give it flavor. Even the very poor have boiled greens, made from the leaves and shoots of a great variety

of plants. Thick stews of beans or ground nuts are the commonest accompaniment. Sweet potatoes are also eaten with rice, but mainly merely as luxuries.

Eggs, meat and fish are considered luxuries. Eggs are always boiled. Large fish are allowed to boil dry and then browned in their own grease. Meat is usually boiled, the broth forming an important part of the meal. Iron meat hooks with ornamental handles are used to remove it from the pot (Fig. 3, g). Meat may also be cut into thin strips and broiled over a bed of coals. Long roasting forks with three or seven tines are used for this (Fig. 3, h, j). At the present time, broiling is not popular, partly because much of the fat is lost and partly because of the extreme toughness of the native beef.

The only materials used for seasoning are potash, salt and chillies. The potash is a substitute for salt and now that the latter has become cheap and plentiful it is only used for variety. The natives say that it must be taken sparingly, as it is bad for the digestion. Potash is made by burning the roots of a certain rush, mixing the ashes with water, and straining off the liquor. The strainers are of matting, triangular at the rim and tapering to a point (Fig. 4, a). The liquor is put in shallow, wooden bowls and allowed to evaporate. The potash is pale grey and granular and is readily crumbled with the fingers.

Salt has always been obtained in trade. Formerly it came from the east coast, where the natives made it by evaporating sea water. It brought a high price locally and Tanala who left their territory to serve as bearers would bring back as much of it as they could. Even now it has an exaggerated value in the eyes of the natives. Traders told me that a handful of salt given with a purchase would delight them more than a gift of three or four times its real value.

The native salt comes in large, creamy white crystals. It is somewhat coarser than that we use in making ice cream. It often contains earth and other impurities and the Tanala dissolve it, pass it through strainers like those used in potash making, and then recrystallize it. It is kept in small gourds, joints of bamboo, or little packs of cloth or matting.

The salt has to be crushed before use and every household has one or more small wooden mortars for the purpose. These mortars are commonly shaped like an hourglass and have a tight-fitting cover (Fig. 4, c). Sometimes two mortars are joined side by side, one being used for salt and the other for chillies (Fig. 4, d). These